

# AIRSPACE SYSTEMS PROGRAM

## 2005 NASA ICNS Conference & Workshop



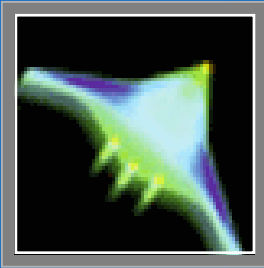
**Robert Jacobsen**  
**Program Manager**

**May 2-5, 2005**

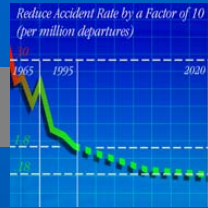
QuickTime™ and a  
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are needed to see this picture.

# Aeronautics Research Mission Directorate

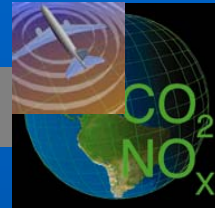
## Objectives



**Aeronautics Research**



**Protect Air Travelers and the Public**



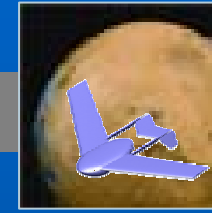
**Protect the Environment**



**Increase Mobility**



**Partnerships for National Security**



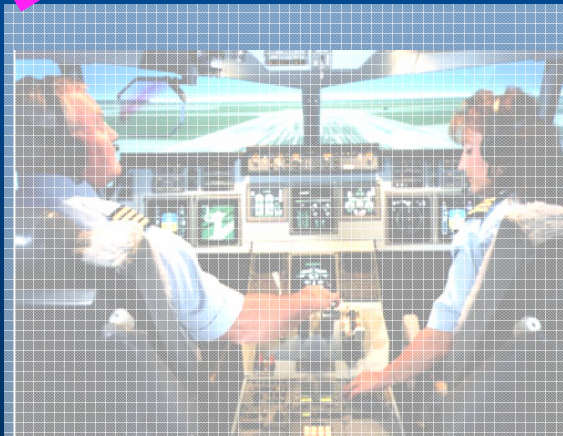
**Explore Revolutionary Aeronautical Concepts**

**Enable more people and goods to travel faster and farther, with fewer delays**

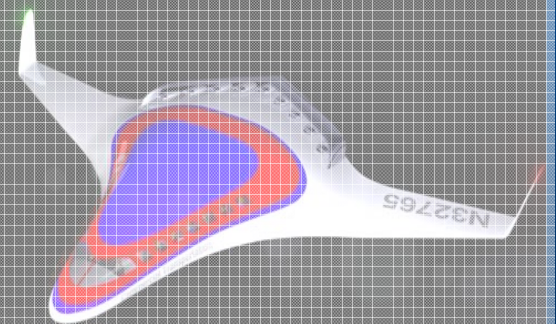
## Programs



**Airspace Systems**



**Aviation Safety & Security**



**Vehicle Systems**



# Airspace Systems Projects



**Virtual Airspace Modeling and Simulation (VAMS)**



**Efficient Flight Path Management (EFPM)**



**Small Aircraft Transportation System (SATS)**



**Strategic Airspace Usage (SAU)**



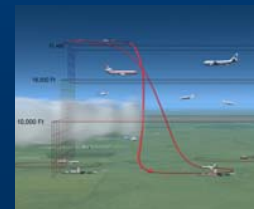
**Human Measures and Performance (HMP)**



**Space Based Technologies (SBT)**

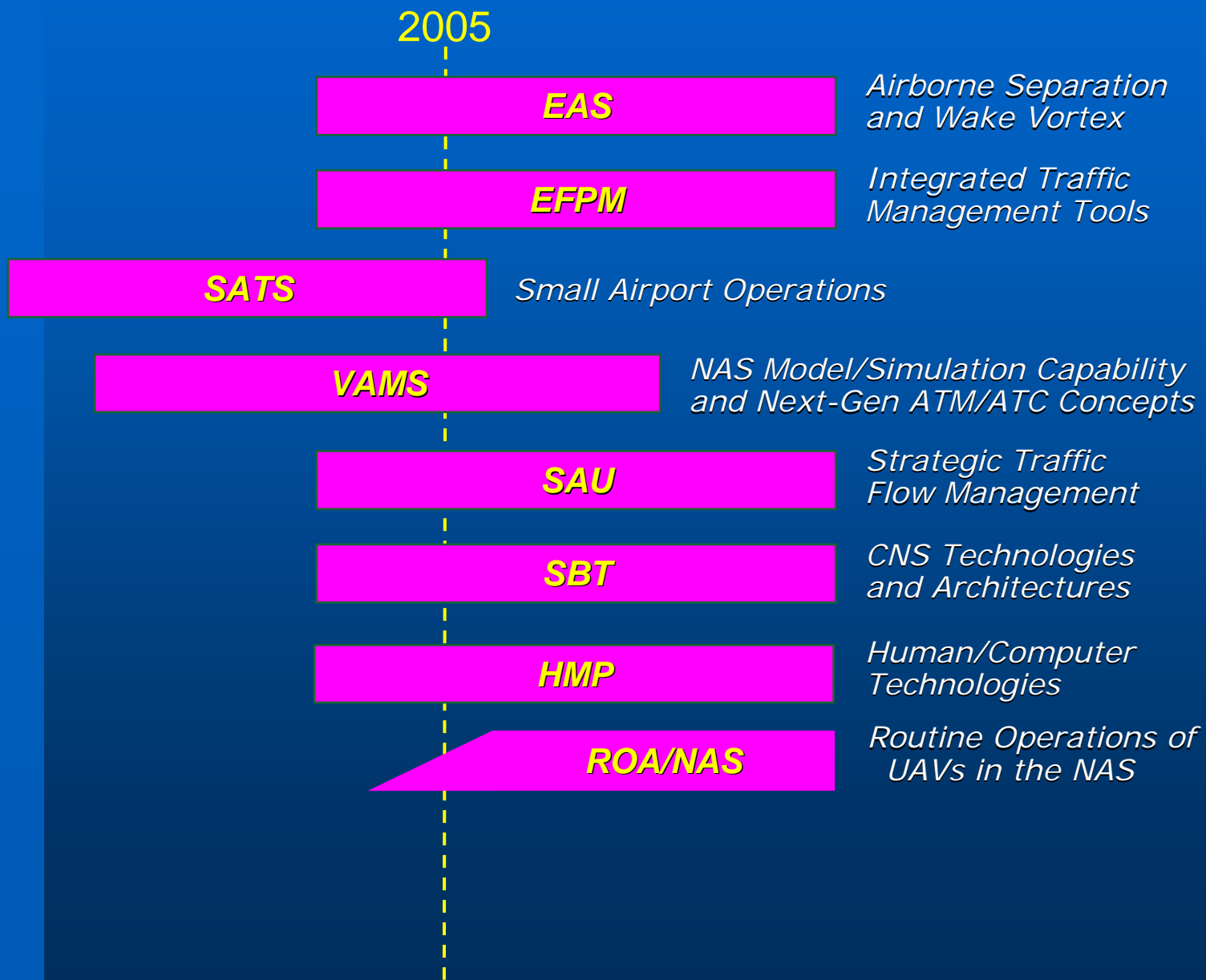


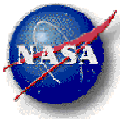
**Efficient Aircraft Spacing (EAS)**



**Remotely Operated Aircraft in the NAS (ROA/NAS)**

# Airspace Systems Program Portfolio





## AS Program Budget (\$M)

Project	FY04	FY05	FY06	FY07	FY08	FY09	Total
Advanced Air Transportation Tech.	98.2						98.2
Small Aircraft Transportation System	31.5	16.5	4.1				52.1
Virtual Airspace Modeling & Simulation	30.5	23.9	37.6	30.7			122.7
Human Measures and Performance	19.0	15.7	22.1	19.7	19.6	19.6	115.6
Efficient Aircraft Spacing	19.1	36.5	38.6	39.4	42.1	44.2	219.9
Efficient Flight Path Management	1.4	12.3	20.5	22.5	28.9	29.0	114.5
Strategic Airspace Usage	0.5	14.6	21.5	23.2	30.4	30.3	120.4
Spaced-Based Technologies	9.1	14.6	25.6	32.6	39.0	39.1	160.0
Technology Integration	19.2	14.6	14.8	15.8	16.7	17.7	98.8
Total	228.5	148.6	184.8	183.7	176.7	179.8	1102.2

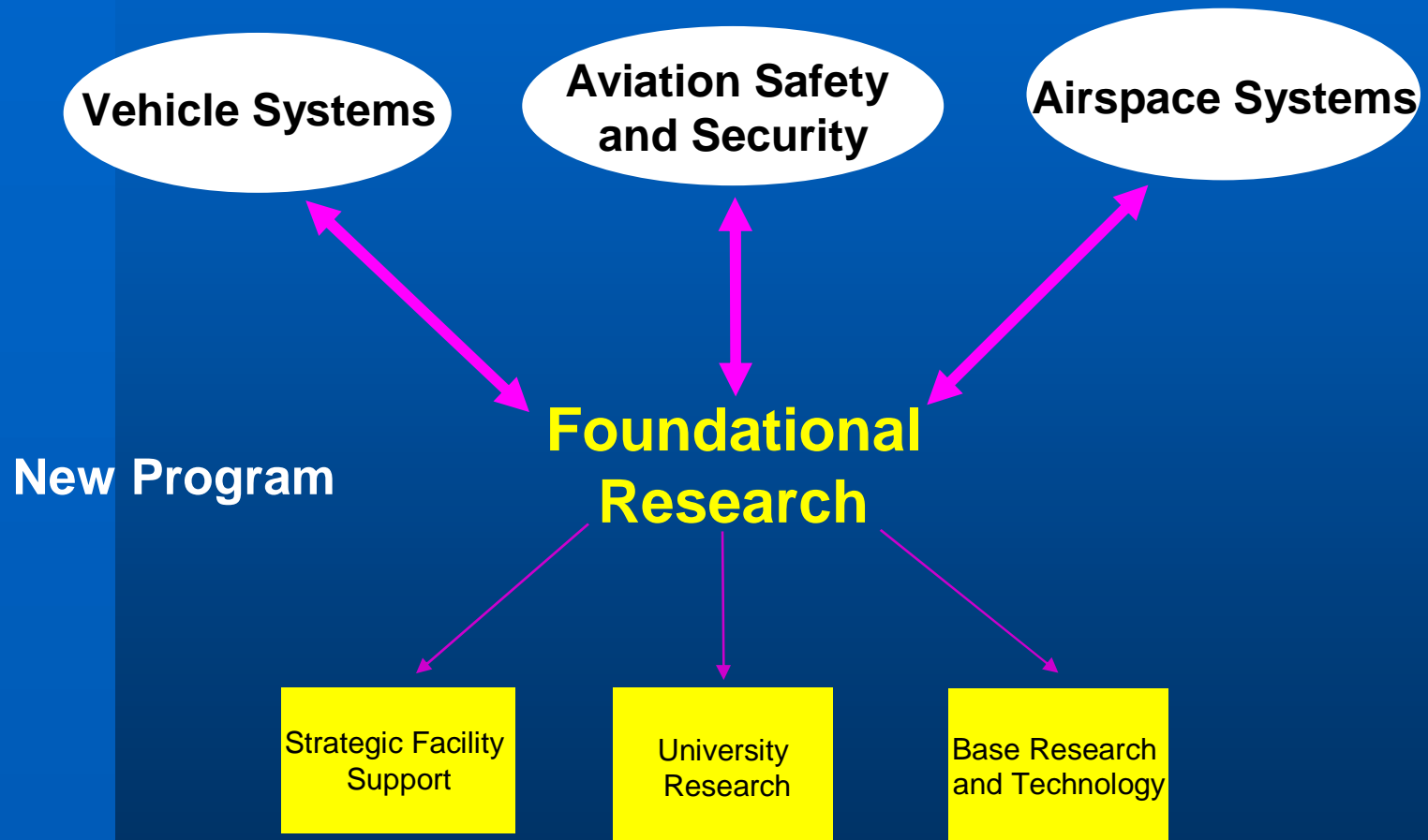
Source (All except AATT): FY2006 POP, NBS Process 335 w/ASPO Adjustments

Source (AATT): FY2004 President's Budget

\* Includes NASA FY2004 Congressional Action

# A Time of Change

- **New Aeronautics Research Operating Model**  
–3 programs still in place



# Where We Are Headed

## Contracts/Partnerships formed with:

- Industry
- Universities
- Other Government Agencies

## JPDO National Plan Provides

- Concept of Operations
- Architecture
- Technology Requirements/Tech Challenges
- Gap Analysis

## Within NASA

- New Administrator
- Future Funding